

## ENERGY TRANSITION

Without hearts and minds, the pressing and global quest for low carbon energy security will fail. While the equation is simple, the intensifying drivers shaping the future of work – notably decarbonisation, digitalisation and the COVID-19 pandemic – are not. Instead, they are inextricably multifaceted and interlinked, at a time when the global economy is recovering from its worst squeeze since the 1930s, according to the International Monetary Fund (IMF).

Meanwhile, the International Energy Agency (IEA) warns that achieving net zero emissions by 2050 will require nothing short of a complete transformation of the global energy system – and that means a complete transformation of the minds curating it. Against this backdrop of the greatest change to the talent market since the first Industrial Revolution in the 1700s, nimbleness is emerging as a golden currency – for both talent and employers.

‘It is really about learning agility. But it is not possible to “crystal ball” what the key skill sets will be on a granular level in 10 years’ time,’ explains Daniel Doe, Vice President for Talent Strategy and Excellence, Shell. ‘Hiring your way out of this will not be the only solution in the intensifying “war on talent”; reskilling will also be a key part.’

**Squeeze intensifies**

Filling the talent coffers is particularly tricky for those prematurely dubbed ‘sunset industries’, notably oil and gas. This is the first time such a barrage of potentially negative disruptors has challenged traditional energy markets since the discovery of modern-day oil in the mid-1800s. Compare the surge in net zero pledges over the last year – 21% of the world’s 2,000 largest public companies have committed, representing annual sales of nearly \$14tn, reported the Energy & Climate Intelligence Unit (ECIU) in March 2021 – against the fact that oil demand is forecast by the IEA to plummet by 75% to 24mn b/d by 2050.

Clearly, the historical powerhouse of modern-day civilisation must work harder to capture talent, which in turn is vital to sustaining short and near-term energy security. The traditional energy roadmap must reshape portfolios in line with low carbon, promoting flexibility,

# Next chapter for talent



The new talent landscape is really about ‘learning agility’ – but it is not possible to ‘crystal ball’ what the key skill sets will be on a granular level in 10 years’ time

Source: Shutterstock

## Working norms are being rewritten across the energy market, reports Michelle Meineke.

increasing reskilling and upskilling – a demanding but non-negotiable list.

‘The historical norm in the oil and gas world of one month on shift followed by one month off, for example, simply will not fly anymore,’ comments Dr Ibilola Amao, Principal Consultant, Lonadek Global Services. ‘Human resources (HR) must be super creative. For example, if there is a

facility in the South Pacific, energy companies and HR teams must think about upskilling locally for that facility. I doubt talent from Europe or the US will now take their families so far from home, especially for such work patterns.’

The argument for green is strengthening. Global employment in renewable energy was estimated to be 11.5mn in 2019, up from 11mn in 2018, according to the

**Let’s talk**

Increased mentoring and reverse mentoring will be paramount to ensure the generational gap in talent – in some cases a chasm – narrows to enable both talent and industry to thrive.

Launched in March, the Energy Institute’s (EI) Mentoring Platform, EI Connect (see p17), aims to act as an intellectual and generational bridge for a growing number of participants, which currently stands at over 200 mentors and mentees. ‘We can learn so much from younger generations who are diving into the worlds of sustainability and digital with both feet, while older generations can offer youngsters an invaluable “been there and done that” perspective on the energy markets,’ comments Emily Brown, EI Professional Development Manager. ●

*‘Digital is changing the way work is done and the shelf life of skills. It was about 30 years in the 1980s versus five years now – and it is still dropping. In the digital workplace, it can be less than two years.’*

**Daniel Doe, Vice President for Talent Strategy & Excellence, Shell**

International Renewable Energy Agency (IRENA)'s 2020 *Renewable energy and jobs report*, and the historically niche market of solar photovoltaics (PV) now accounts for 3.8mn jobs. The broader socio-economic benefits also help attract talent into what employees see as a 'career of the future'. The growth of the environmental, social and governance (ESG) market adds to the narrative that green is booming with potential, with such global assets on track to exceed \$53tn by 2025, according to Bloomberg Intelligence in February 2021. Improvements to gender equality are also being welcomed; an area the traditional energy markets have struggled with for decades. Already, more than 20% of the 1.2mn people employed worldwide in the relatively new industry of wind power are women, reports IRENA.

But there is still an obvious lag between talent and employers' ideals of a green-savvy workforce and the reality of ready-to-go talent. Nearly one-fifth of companies cited a lack of expertise and/or experience when asked by packaging company Smurfit Kappa about the biggest barrier to the implementation of sustainability practices in their organisation. Yet 83% saw sustainability as an

opportunity to exploit. Academia plays a critical bridging role in minimising this gap.

'As I see it, the link between universities, research and development (R&D) and industry is well established, even if it is skewed to the London, Oxford, Cambridge triangle and the south-east of England,' comments Dr Stuart Addy, Vice Chair of the Continuous Professional Development Panel at the Energy Institute. 'The development of specific academic offerings to meet the need for graduates to operate in new areas of energy markets seems less well established. However, there is evidence that universities are now working more in partnership with local government and hopefully with professional bodies to help plan for the future.'

#### Digital drivers

The future may be green, but it is also digital. Approximately 90% of jobs worldwide in the future will require such skills, according to the European Commission (EC). And as with sustainability, there are looming gaps in skill sets. The EC reported in March 2021 that in Europe, 170mn people – nearly three times the size of the UK's entire population

– between 16 and 74 years of age lack basic digital skills. A study of six European countries – France, Germany, Ireland, Poland, Spain and the UK (pre-Brexit) – revealed a current shortage of 477,000 information and communication technology (ICT) specialists at different skills levels. Amid the global push for digitalisation, this figure could soar to 1.26mn in 2020 and 1.67mn in 2025, according to Empirica/JP Morgan research. Plus, energy companies need to work harder to divert digitally agile talent's attention away from tech companies; competitors perceived as innovative, flexible and pro-green.

'Right now, digitalisation is the most important factor in the talent markets, as it can act as a primary enabler to other pressing global goals, such as sustainability,' states Steve Griffiths, Senior Vice President, Research and Development, Khalifa University, UAE. 'There are two sides of the coin that need attention. One is developing digital engineers; those who can truly understand how the hardware and processes for storing, accessing and using data works. The other is a need for more digital scientists; those who can make sense of data and increase its value to an organisation. There

*'There are so many anti "dirty" energy groups who have the voice of the press and the following of the millennials. Oil and gas companies are truly walking on eggshells to produce energy at an affordable level while still making a profit and ticking social and environmental boxes.'*

**Dr Ibilola Amao, Principal Consultant, Lonadek Global Services**

## Are you a leader in the energy sector?

**If you're working in a senior level energy-related role, you could be eligible to upgrade your membership to Fellow of the Energy Institute (FEI) status.**

Fellowship of the EI is awarded to energy's leaders and influencers, providing the highest level of recognition for outstanding members of the EI community.

Anyone can apply to become a Fellow. To be successful, you'll be able to show that you have played a significant role in providing innovation, problem-solving and thought-leadership in the sector.



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is no doubt that we need both along with those well-versed in cybersecurity.'

However, a warning accompanies the vast potential of digitalisation. It can accelerate the gulf between the haves and have nots – half the world's population are still offline, according to United Nations' (UN) figures – when the UN's Sustainable Development Goals (SDGs) are trying to achieve the opposite. Energy companies must play a proactive role in supporting those offline as part of their ESG efforts. Effectively doing so would not only boost the breadth of their potential hiring pool in the late 2020s onwards, but it would also help plug weaknesses in energy security; over 1bn people worldwide live without reliable access to power.

#### The pandemic effect

The COVID-19 pandemic has sparked a rethink in how talent – and subsequently companies – view the world of work. Indeed, momentum for a four-day week – long discussed, rarely instigated – is mounting as employees enjoy the health and lifestyle benefits of both remote and reduced

working. A successful trial in Iceland with 2,500-plus workers has gained global attention and Spain has launched a modest pilot for interested companies. Environmental benefits feed the argument for a four-day week, especially amongst younger talent. Achieving this set-up by 2025 would shrink the UK's emissions by 127mn tonnes – equivalent to taking the country's entire private car fleet off the road, according to a May 2021 study from Platform London, a UK-based environmental and social justice campaign group.

But one size does not fit all. Working from home 'is not a new normal', it is 'an aberration that we are going to correct as quickly as possible', argues David Solomon, CEO, Goldman Sachs, speaking to the BBC earlier this year. Solomon is not alone. Jared Spataro, Corporate Vice President at Microsoft 365, says: 'Those impromptu encounters at the office help keep leaders honest. With remote work, there are fewer chances to ask employees: "Hey, how are you?" and then pick up on important cues as they respond.' But Spataro adds a red flag for all corporates: 'The data is clear: our



The future may be green, but it is also digital – approximately 90% of jobs worldwide in the future will require such skills, according to the European Commission

Source: Shutterstock

people are struggling. And we need to find new ways to help them.'

Whatever companies' post-pandemic route – at home, at work, a hybrid – happiness, satisfaction and wellbeing will be far higher on talent's totem pole of 'must haves' than pre-pandemic. Energy companies that respond accordingly will be rewarded with a sharpened competitive edge when it comes to locking in intellectual capital – a game they cannot afford to ignore. ●

## New skills for a new world

**'What skills are required for the energy transition?' asks Sinead Obeng, Regulatory Affairs Advisor, Gazprom Marketing & Trading and EI Trustee.**



Sinead Obeng

When we are asked to think about 'green skills' or the skills needed for the energy transition, what comes to mind? Usually this dialogue focuses on the promotion of STEM (science, technology, engineering and mathematics) subjects, which was particularly apparent when I was invited to meet the UK government's Green Jobs Taskforce alongside my fellow Trustees at the EI.

Now don't get me wrong, STEM allows us to find technical/technological and nature-based solutions that are critical for carbon sequestration and decarbonisation. However, there are other important aspects that must marry up. Project economics and regulatory policy frameworks must be complimentary to these initiatives, whilst ensuring that the end-consumer still has affordable access to energy. Clearly there is no single skillset that outweighs the other for the

energy sector to succeed. Skills selection should be at the forefront of discussions on how to equip the future workforce for net zero.

Generation 2050 understands this. Out of 1,000+ EI Young Professionals surveyed, the majority believe T-shaped skills will be crucial to achieving net zero. This does not mean an individual needs to know everything, but simply need to demonstrate the value of having a broad and holistic view of the energy system.

I recently spoke with a fellow Young Professional, Albert Boohene, a Mechanical Engineer at Subsea 7, about the challenges that might lie ahead for young professionals that have developed skills in oil and gas but may have concerns about their role in the energy transition.

He wasn't anxious about the issue. 'The only thing that's changing is the commodity. The nature of the work and skillset required is similar from an engineering perspective,' he said. 'One of the strongest drivers will be the responsiveness of companies to implement rapid change to meet net zero, and their willingness to empower new and existing staff to work on green projects. For example, Subsea 7 has recently acquired a wind infrastructure business, which will present opportunities for us to utilise current skills for renewable projects.'

It is vital that companies and their employees work together to develop the talent pipeline required to help achieve net zero. Businesses need to move on from traditional job requirements with a more flexible, transferable skills-based approach rather than relying on direct experience. At the same time, we as young professionals and new entrants to the industry should be bold when applying for jobs and new opportunities; demonstrating a commitment to learning whilst showing prospective employers that we can create value through this energy transition. ●

**1.2bn**  
employees worldwide will be affected by the adaptation of automation technologies and artificial intelligence (AI) over the next decade. This equates to 50% of the global economy and disrupts \$14.6tn in wages, according to the World Economic Forum (WEF).

**66%**  
rise in number of people working on documents and 62% of calls and meetings unscheduled or conducted ad hoc, according to Microsoft. Companies must be alert to the risk of employees' burnout.